

Virginia Title V Operating Permit

Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, and 9 VAC 5-80-50 through 9 VAC 5-80-305 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name:	Jewell Coke Company, L.P.
Facility Name:	Jewell Coke Company, L.P.
Facility Location:	U.S. 460 West P.O. Box 70 Vansant, VA 24656
Registration Number:	10200
Permit Number:	SWRO10200

Effective Date: 10/02/2007

Expiration Date: 10/01/2012

Dallas R. Sizemore
Deputy Regional Director

Signature Date: _____

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I. Facility Information

Permittee

Jewell Coke Company, L.P.
U.S. 460 West
P. O. Box 70
Vansant, VA 24656

Responsible Official

Mr. Mark Ball

Facility

Jewell Coke Company, L.P.
U.S. 460 West
P.O. Box 70
Vansant, VA 24656

Contact Person

Mr. J. P. Richardson
Manager of Contract Mines and Environment
276-935-8810

NET Identification Number: 51-027-0004

Facility Description: SIC Code: 3312 - Jewell Coke Company, L.P., is a non-recovery, metallurgical coke production facility located at the junction of Route 460 and Route 638 on Dismal River in Buchanan County, Virginia.

Coal is transferred from storage, crushed if necessary, and charged to the coke ovens via open and enclosed belts and conveyors. These ovens use non-recovery coking technology which involves using the volatile fraction driven off the coal as fuel for carbonization, producing heat, carbon dioxide and water vapor. Waste gas from the coking process in the ovens is controlled using common tunnel afterburners. Waste gas from a number of the ovens is sent to the thermal dryer to dry the coal. Emissions from the thermal dryer are controlled by a venturi scrubber. After the coking process is complete, the coke is then pushed out of the ovens into hot cars located under a shed. The hot cars are transferred to the quench tower, which is equipped with baffles where cleaned water is dumped over the hot coke. The coke is then dumped from the hot cars onto the coke wharf where a series of open and enclosed belts take the coke to the coke processing plant.

At the coke processing plant, the coke is separated into appropriate sizes. A baghouse collects the majority of the dust and some coke breeze from the coke processing plant while some of the dust is emitted as fugitive. The coke is then loaded out into trucks and /or

railcars, or taken to the Main Coke Storage Pile. A portion of the coke may be blended back into the coke handling system.

The facility is a Title V major source of particulate matter (PM₁₀), sulfur dioxide (SO₂), hydrogen chloride (HCl), and nitrogen oxides (NO_x) emissions. This source is located in an attainment area for all pollutants. The facility was previously permitted under a Minor NSR permit issued on June 12, 2002.

On March 30, 2007, an application for renewal of the Title V permit was received from Jewell Coke Company.

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II. Emission Units

Equipment to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
01**	S-2 through S-17	143 Thompson Sole Flue Non-Recovery Coke Ovens	45-55.1 tons/oven/48hrs input*	Common Tunnel Afterburners	02	PM ₁₀ , VOCs, CO	NSR Permit dated June 12, 2002
04	F2	Coal Handling	1200 tons/hr input	N/A	N/A	N/A	NSR Permit dated June 12, 2002
05	S-18, S-19, S-20, F-15	Coal Charging	1200 tons/hr input	3 - Donaldson Torit Baghouses	03, 04, 05	PM ₁₀	NSR Permit dated June 12, 2002
06	F3	Coke Pushing	825 tons/hr input	Shed	10	PM ₁₀	NSR Permit dated June 12, 2002
07	S-21, S-22	Coke Quenching	825 tons/hr input	Quench Tower Baffles	06, 07	PM ₁₀	NSR Permit dated June 12, 2002
08	F6	Coke Handling	825 tons/hr input	N/A	N/A	N/A	NSR Permit dated June 12, 2002
09	F-7, S-23	Coke Processing	825 tons/hr input	1 - Donaldson Torit Baghouse	08, 09	PM ₁₀	NSR Permit dated June 12, 2002
13	S-1	Heyl & Patterson Model 135 Thermal Dryer	600 tons/hr input	Research Cottrell Venturi Scrubber	S-1	PM ₁₀ , SO ₂	NSR Permit dated June 12, 2002
25	F18	Coal Crushing -Cage Paktor Coal Pulverizer	600 tons/hr input	N/A	N/A	N/A	NSR Permit dated June 12, 2002

*Charging rate may vary.

**Oven Batteries 3B, 3C, 2D, 2E, 3F, and 3G.

III. Process Equipment Requirements – Coke Manufacture

A. Limitations

1. Unit 01 - The particulate, VOC, and CO emissions shall be controlled by sole flues, common waste heat tunnels/afterburners, and good combustion practices. The ovens and appurtenances shall be provided with adequate access for inspection.
(9 VAC 5-80-110 and Condition 3 of NSR permit dated 6/12/02)
2. Unit 05 - The backdraft fugitive emissions from the charging of each oven at Batteries 3C, 2D, 2E, 3F, and 3G shall be controlled by a collection apparatus (hood or equivalent) utilizing a Donaldson-Torit cartridge filtration system or equivalent.
(9 VAC 5-80-110 and Condition 6 of NSR permit dated 6/12/02)
3. Unit 01 - Hourly emissions from the operation of the coke ovens at the facility shall not exceed the limits as shown in the following table, depending on the number of ovens in operation. When charge tonnage exceeds 45 tons in one or more ovens, one or more ovens in Battery 3B shall be shutdown, according to the following table.

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Battery 3B Oven Limits

Charge Tons	SO ₂	NO _x	Part.	PM ₁₀	Lead
45.0	10.0	0.94	1.4	1.4	0.01

Battery 3C, 2D, 2E, 3F, 3G Oven Limits

Operating Ovens			Oven Emission Limits (lb/hr/oven)					
3B	New	Total	Tons	SO ₂	NO _x	Part.	PM ₁₀	Lead
26	116	142	45.0	10.0	0.94	0.92	0.92	0.01
25	116	141	45.4	10.1	0.95	0.93	0.93	0.01
24	116	140	45.8	10.2	0.95	0.94	0.94	0.01
23	116	139	46.2	10.3	0.96	0.95	0.95	0.01
22	116	138	46.6	10.2	0.95	0.94	0.94	0.01
21	116	137	46.9	10.4	0.98	0.98	0.98	0.01
20	116	136	47.3	10.5	0.99	0.99	0.99	0.01
19	116	135	47.7	10.6	0.99	1.00	1.00	0.01
18	116	134	48.1	10.7	1.00	1.01	1.01	0.01
17	116	133	48.5	10.8	1.01	1.02	1.02	0.01
16	116	132	48.9	10.9	1.02	1.04	1.04	0.01
15	116	131	49.3	10.9	1.03	1.05	1.05	0.01
14	116	130	49.7	11.0	1.03	1.06	1.06	0.01
13	116	129	50.0	11.1	1.04	1.07	1.07	0.01
12	116	128	50.4	11.2	1.05	1.08	1.08	0.01
11	116	127	50.8	11.3	1.06	1.10	1.10	0.01
10	116	126	51.2	11.4	1.07	1.11	1.11	0.01
9	116	125	51.6	11.5	1.07	1.12	1.12	0.01
8	116	124	52.0	11.5	1.08	1.13	1.13	0.01
7	116	123	52.4	11.6	1.09	1.14	1.14	0.01
6	116	122	52.8	11.7	1.10	1.15	1.15	0.01
5	116	121	53.1	11.8	1.11	1.17	1.17	0.01
4	116	120	53.5	11.9	1.12	1.18	1.18	0.01
3	116	119	53.9	12.0	1.12	1.19	1.19	0.01
2	116	118	54.3	12.1	1.13	1.20	1.20	0.01
1	116	117	54.7	12.1	1.14	1.21	1.21	0.01
0	116	116	55.1	12.2	1.15	1.23	1.23	0.01

The hourly emission limits shown above are maximum per oven limits based on the number of ovens operating. Compliance with these emission limits shall be as stated in Section III.D.2. of this permit. It shall in no way be construed that operation of the facility within the above stated hourly limits implies source compliance on an annual basis. Actual annual emission limits are based on the total allowable coal consumption as outlined in Condition 5 of this permit, and the total emissions as outlined in Condition 4 of this permit.

(9 VAC 5-80-110, 9 VAC 5-50-180, 9 VAC 5-50-260 and Condition 8 of NSR permit dated 6/12/02)

4. Total plantwide emissions from the operation of the thermal dryer and 143 ovens at the facility, while consuming coal as outlined in Condition 5 of this permit, shall not exceed the limitations specified below, calculated monthly as the sum of each consecutive 12 month period:

PM-10	553.3 tons/yr
Sulfur Dioxide	5086.8 tons/yr
Nitrogen Oxides	520.8 tons/yr
Lead	5.2 tons/yr

At no time shall there be more than 143 ovens in operation at the facility.
(9 VAC 5-80-110, 9 VAC 5-50-260 and Conditions 9 and 11 of NSR permit dated 6/12/02)

5. The plantwide coking process shall consume no more than the amount of coal per year specified by the following equation (which is illustrated in the graph attached to this permit, Attachment A), calculated monthly as the sum of each consecutive 12 month period:

$$\text{Max. coal charge (T/yr)} = (9.92 \times \text{Dryer hours per yr}) + [839,822/(\%S)]$$

In no event shall the coal charged to the ovens exceed 1,041,510 tons per year.

The formula in this condition is valid for certain ranges of values for sulfur content and dryer operating hours, as illustrated in the graphical representation in Attachment A. At conditions where actual operating parameters are outside the illustrated ranges and the formula produces a calculated tonnage in excess of 1,041,510, the limitation of 1,041,510 prevails and the resultant formula-calculated tonnage is not relevant to compliance with the condition. The express purpose of this condition is to allow flexibility for the source to operate under conditions of varying coal sulfur content and dryer operating hours, and still be able to process 1,041,510 tons per year of coal. The formula in this condition allows the source to, for example, process coal with up to 0.88 weight percent sulfur and either reduce overall coal consumption or increase dryer operating hours, or a balance of the two. It is also implicit in the permit condition that the source could process up to 1,041,510 tons of coal per year, provided that they comply with the coal sulfur content limit, permit sulfur dioxide limits, etc.

(9 VAC 5-80-110, 9 VAC 5-170-160 and Condition 15 of NSR permit dated 6/12/02)

6. Visible emissions from each backdraft filter exhaust shall not exceed ten (10) percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).
(9 VAC 5-80-110 and Condition 17 of NSR permit dated 6/12/02)
7. The following requirements applicable to visible emissions from charging operations are from 40 CFR 63 Subpart L. The facility shall be operated in compliance with Federal requirements under 40 CFR 63, Subpart L, including future revisions (current copy attached as Attachment B) and with the requirements of 40 CFR part 63, subpart A. All terms used regarding 40 CFR 63, Subpart L shall have the meanings as defined in 40 CFR 63.301 and 40 CFR 63.2.
(9 VAC 5-60-100, 40 CFR 63.300, 40 CFR 63, Subpart A)

Note: The Battery 3B ovens are exempt from the requirement for a collection hood for charging emissions. The Battery 3B ovens were constructed/installed in May 1989.

- a. The permittee shall meet the requirements of 40 CFR 63.303(a)(1) by (a) 0.0 percent leaking coke oven doors as defined by the procedures in 40 CFR 63.309(d)(1); or, (b) the permittee shall monitor and record, once per day for each day of operation, the direction of air flow in each oven or common battery tunnel to ensure that the ovens are operated under negative pressure.
- b. For charging operations, the permittee shall install, operate, and maintain an emission control system on all ovens, except for the Battery 3B ovens, for the capture and collection of emissions in a manner consistent with good air pollution control practices for minimizing emissions from the charging operations.
- c. For charging operations, for each day of operation, the permittee shall have and implement an emissions control work practice plan (Attachment C) in accordance with 40 CFR 63.306 for each nonrecovery oven battery, the components of which are as follows:
 - (1) An initial and refresher training program for all coke plant operating personnel with responsibilities that impact emissions, including contractors, in job requirements related to emission control. The training program must include:
 - (a) A list, by job title, of all personnel that are required to be trained and the emission points associated with each job title;
 - (b) An outline of the subjects to be covered in the initial and refresher training for each group of personnel;
 - (c) A description of the training methods;

- (d) A statement of the duration of initial training and the duration and frequency of refresher training;
 - (e) A description of the methods to be used at the completion of all training to demonstrate successful completion; and
 - (f) A description of the procedure to be used to document performance of plan requirements pertaining to daily operation of the coke oven battery and its emission control equipment.
- (2) Procedures for controlling emissions from nonrecovery coke oven batteries including:
- (a) Procedures for charging coal into the oven;
 - (b) If applicable, procedures for the capture and control of charging emissions;
 - (c) Procedures for cleaning coke from the door sill area for both sides of the battery after completing the pushing operation and before replacing the coke oven door;
 - (d) Procedures for cleaning coal from the door sill area after charging and before replacing the push side door;
 - (e) Procedures for filling gaps around the door perimeter with sealant material, if applicable, and
 - (f) Procedures for detecting and controlling emissions from smoldering coal.
- (3) Procedures for maintaining, for each emission point subject to visible emission limitations under Subpart L, a daily record of the performance of plan requirements pertaining to the daily operation of the coke oven battery and its emission control equipment, including:
- (a) Procedures for recording the performance of such plan requirements; and
 - (b) Procedures for certifying the accuracy of such records by the permittee.
- (4) The permittee shall revise the emissions work practice control plan in accordance with requirements of 40 CFR 63.306(d).
- (5) The permittee shall include a written startup, shutdown and malfunction section in the work practice plan in accordance with 40 CFR 63.310. This section shall describe procedures for operating the battery, including

associated air pollution control equipment during a startup, shutdown, or malfunction in a manner consistent with good air pollution control practices for minimizing emissions; and procedures for correcting and reporting a malfunction as quickly as practicable.

- d. The permittee shall follow reporting and recordkeeping requirements as stated in 40 CFR 63.311, including the following:

(1) Notifications

- (a) The permittee shall notify the Administrator of the intent to construct a new coke oven battery (including reconstruction of an existing coke oven battery), including the anticipated date of startup.

(2) Semiannual compliance certification

- (a) Certification, signed by the permittee, that a startup, shutdown, or malfunction event did not occur for a coke oven battery during the reporting period or that a startup, shutdown, and malfunction event did occur and a report was submitted according to the requirements in 40 CFR 63.310(e), and
- (b) Certification, signed by the permittee, that work practices were implemented if applicable under 40 CFR 63.306.

(3) Recordkeeping

- (a) The permittee shall maintain all required data and information in a permanent form suitable for inspection onsite for at least one year and must thereafter be accessible within 3 working days to the Administrator for a period of 5 years from the date of the data and information. The emissions control work practice plan shall be kept onsite at all times. The permittee shall maintain the following data and information:
- (i) Records of daily pressure (direction of air flow) monitoring;
- (ii) Records demonstrating the performance of work practice requirements according to 40 CFR 63.306(b)(7);
- (iii) Design characteristics of each emission control system for the capture and collection of charging emissions, as required by 40 CFR 63.303(b)(2);
- (iv) A copy of the work practice plan required by 40 CFR 63.306 and any revision to the plan; and

(v) Records specified in 40 CFR 63.310(f) regarding the basis for each malfunction notification.

(40 CFR 63.300; 303, 304(c), 306(a), (b)(1)(6)(7)(8), (c), (d); 310 - 313; 9 VAC 5-50-20E, 9 VAC 5-80-110, 9 VAC 5-80-110E2, and 9 VAC 5-170-160)

B. Monitoring

1. Monitoring to comply with the MACT Standard, 40 CFR 63, Subpart L, shall consist of the following:
 - a. Monitor the direction of air flow for each common battery tunnel daily to ensure that the oven is operating under a negative pressure. Monitoring will be performed by opening a damper in the common tunnel of each battery to assure that air enters the tunnel through the open damper and ensuring that the battery is operating under negative pressure (Refer to Permittee's Work Practice Control Plan, Attachment C).
 - b. Implement procedures in the permittee's Work Practice Control Plan (Attachment C), for controlling emissions from charging operations, cleaning of oven door sills, operating procedures using the Donaldson-Torit Filtration System, auditing of performance of plan requirements, procedures for startup, shutdown and malfunctions, and training.
 - c. The permittee shall submit monitoring information to demonstrate compliance with the MACT Standard on March 1 and September 1 of each calendar year. (9 VAC 5-80-110, 9 VAC 5-80-110F, and Conditions 6 and 17 of NSR permit dated 6/12/02 and 40 CFR 63.303, 306)

C. Recordkeeping

The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Southwest Regional Office. These records shall include, but are not limited to:

1. The daily, monthly and yearly quantities of coal charged to each oven at the facility, and daily, monthly and yearly coke production. (Condition 24 of NSR permit dated 6/12/02)
2. Coal shipments processed, indicating sulfur, ash, volatile, and moisture content per shipment. (Condition 24 of NSR permit dated 6/12/02)
3. Monthly average of sulfur content of coal charged to the ovens. (Condition 24 of NSR permit dated 6/12/02)
4. Total number of operating and non-operating ovens each month. (Condition 24 of NSR permit dated 6/12/02)

5. Coke analysis data indicating moisture, sulfur, and volatile content. (Condition 24 of NSR permit dated 6/12/02)
6. The total number of operating hours per month for each oven. (Condition 24 of NSR permit dated 6/12/02)
7. The number of cumulative days each oven is operating at 50 tons or more of coal charges. (Condition 24 of NSR permit dated 6/12/02)
8. Hourly emissions, calculated as a monthly average (as stated in Condition 2.b. of Section III.D. of this permit), for each pollutant as limited in Condition 3, Section III.A. of this permit. (Condition 24 of NSR permit dated 6/12/02)
9. Annual emissions of SO₂ shall be calculated monthly as follows:

$$\text{SO}_2 \text{ (T/yr)} = 0.006057 \times (\%S) \times [\text{charge tonnage} - (9.92 \times \text{dryer hours})]$$

Annual emissions shall be calculated monthly as the sum of each consecutive 12 period.
(Condition 24 of NSR permit dated 6/12/02)

10. Annual emissions for the remaining criteria pollutants in this permit shall be calculated using the annual coal charge and the pollutant-specific emission factors, based on performance testing, for both Battery 3B and the other oven batteries. Annual emissions shall be calculated monthly as the sum of each consecutive 12 period. (Condition 24 of NSR permit dated 6/12/02)
11. Results of any performance testing for the batteries. (Condition 24 of NSR permit dated 6/12/02)
12. Annual quantity of coal charged to all ovens at the facility, calculated monthly as the sum of each consecutive 12 month period. (Condition 24 of NSR permit dated 6/12/02)
13. The daily pressure (direction of air flow) in each common operating battery tunnel. (40 CFR 63.311)
14. Audits of the performance of the Work Practice Control Plan. (40 CFR 63.311)
14. Notification for New Coke Oven Construction or Reconstruction of Existing Oven and Notification of Malfunction. (40 CFR 63.311)
15. Semiannual compliance certifications. (40 CFR 63.311)
16. A copy of the Work Practice Plan. (40 CFR 63.311)
17. Design characteristics of the emission control system for collection of charging emissions from the ovens. (40 CFR 63.311)
18. Basis for each malfunction notification. (40 CFR 63.311)

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-50-50, 9 VAC 5-80-110, Condition 24 of NSR permit dated 6/12/02, and 40 CFR 63.311)

D. Performance Testing

1. At such time that any set of at least nine (9) ovens are operated on 72-hour charge cycles for 30 consecutive days or more, performance tests shall be conducted for particulate matter, sulfur dioxide, and nitrogen oxides from representative stacks on the ovens to determine compliance with the emission limits contained in Section III.A.4. of this permit. For batteries that provide heat to the thermal dryer, the tests shall be conducted while the thermal dryer is not in operation and no waste heat is being recovered from any oven in the battery and while each oven is operating on 72-hour charge cycles. Tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30 and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410. The details of the tests are to be arranged with the Director, Southwest Regional Office. The permittee shall submit a test protocol at least thirty (30) days prior to testing. Two (2) copies of the test results shall be submitted to the Director, Southwest Regional Office within 45 days after test completion and shall conform to the test report format enclosed with this permit (Attachment D).
(9 VAC 5-80-110 and Condition 19 of NSR permit dated 6/12/02)
2. Compliance with the emission limits in Section III.A.3. of this permit shall be demonstrated by (a) performance testing and/or by (b) calculation, as described below, or by other methods approved by DEQ:
 - a. After coal charge tonnage to more than two ovens is 50 tons or more each for 30 cumulative days, performance testing shall be completed within 60 days from that date. The test shall be conducted for particulate matter, sulfur dioxide, and nitrogen oxides on a representative stack of one operating battery (3C, 2D, 2E, 3F, or 3G) to demonstrate compliance with the emission limits in Section III.A.3. of this permit, using the maximum amount of coal charge that can efficiently be coked out. A maximum of two performance tests shall be required to satisfy this condition. Each performance test shall be conducted on a different operating battery containing those ovens charging 50 tons or more. For batteries that provide heat to the thermal dryer, the tests shall be conducted while the thermal dryer is not in operation and no waste heat is being recovered from any oven in the battery. Tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30 and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410. The details of the tests (methods, procedures, timing, etc.) are to be arranged with the Director, Southwest Regional Office. The permittee shall submit a test protocol at least thirty days prior to testing. Two copies of the test results shall be submitted to the Director, Southwest Regional Office within 45 days after test completion and shall conform to the test report format enclosed with this permit.

- (9 VAC 5-50-30, 9 VAC 5-50-260, 9 VAC 5-80-110, Condition 18 of NSR permit dated 6/12/02, and 9 VAC 5-80-10 H)
- b. The permittee shall maintain records of actual emissions from the coke ovens. The content and format of such records shall be arranged with the Director, Southwest Regional Office. At a minimum, actual emission calculations shall use operational data as required by Section III.C. of this permit, for demonstration of compliance with Section III.A.3. limits of this permit.
(9 VAC 5-50-260, Condition 18 of NSR permit dated 6/12/02, and 9 VAC 5-80-110)
3. The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.
(9 VAC 5-50-30 and 9 VAC 5-80-110)
4. The permittee shall complete performance testing, as specified below, on one exhaust stack at any of the following coke oven batteries:
- a. Batteries 2D, 2E, 3B, 3C, 3F or 3G.

Performance test details are as follows:

- b. The tests shall be performed and compliance determined for nitrogen oxides, sulfur dioxide, particulate matter (PM10), lead, mercury, and hydrogen chloride.
- c. Each test shall consist of three runs at the maximum production rate of the oven.
- d. The tests shall be performed, reported, and compliance demonstrated (where permit and/or regulatory limits apply) anytime after permit issuance but no later than 18 months prior to the expiration date of this permit.
- e. The details of the tests, including approval of test methods for the criteria pollutants and hazardous air pollutants, are to be arranged with the Director, Southwest Regional Office.
- f. The permittee shall submit a test protocol at least 30 days prior to testing.
- g. The permittee shall submit notifications for the test protocol submittal.
- h. Two copies of the test results shall be submitted to the Director, Southwest Regional Office within 45 days after test completion and shall conform to the test report format enclosed with this permit.

5. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods in accordance with procedures approved by the DEQ:

Pollutant	Test Method (40 CFR Part 60, Appendix A)
NO _x	EPA Method 7
SO ₂	EPA Method 6
PM/PM-10	EPA Method 5, 9, 17

(9 VAC 5-80-110)

IV. Process Equipment Requirements – Thermal Dryer

A. Limitations

- The sulfur dioxide and particulate matter emissions from the operation of the Reyland Patterson thermal coal dryer shall be controlled by operation of a high energy venturi scrubber. The pH of the high energy venturi scrubber liquid shall be maintained at an average level not less than 7.5 as specified in Section IV.B.1. Appropriate procedures shall be maintained by the permittee for maintaining scrubber liquid pH. The scrubber shall be provided with adequate access for inspection. The scrubber shall be equipped with a device to continuously measure the differential pressure through the scrubber.
(9 VAC 5-50-260, 9 VAC 5-80-110, and Condition 7 of NSR permit dated 6/12/02)

- Emissions from the operation of the thermal coal dryer shall not exceed the limits specified below, calculated monthly as the sum of each consecutive 12 month period:

Particulate Matter	0.031 gr/dscf	7.88 lbs/hr	34.6 tons/yr
PM-10	0.031 gr/dscf	7.88 lbs/hr	34.6 tons/yr
Sulfur Dioxide		1.4 lbs/hr	3.9 tons/yr

It shall in no way be construed that operation of the facility within the above stated hourly limits implies source compliance on an annual basis. Actual annual plantwide emissions are based on the total allowable plantwide coal consumption as outlined in Section III.A.5. of this permit, and the total plantwide emissions as outlined in Section III.A.4. of this permit.

(9 VAC 5-50-260, 9 VAC 5-80-110 and Condition 10 of NSR permit dated 6/12/02)

- In no event, shall the dryer be operated less than the number of hours per year specified by the following equation (which is illustrated in the graph attached to this permit), calculated monthly as the sum of each consecutive 12 month period:

$$\text{Min. dryer operation (hr/yr)} = [0.1008065 \times \text{Coal charged (T/yr)}] - [84,660/(\%S)]$$

The facility emission limits are specified in Section III.A.4. of this permit, and the coal input limits are specified in Section III.A.5. of this permit. Sulfur content of the coal shall not exceed 0.88%.

The formula in this condition allows the source to, for example, process coal with up to 0.88 weight percent sulfur and either reduce overall coal consumption or increase dryer operating hours, or a balance of the two. It is also implicit in the permit condition that the source could process up to 1,041,510 tons of coal per year, provided that they comply with the coal sulfur content limit, permit sulfur dioxide limits, etc.

(9 VAC 170-160, 9 VAC 5-80-110 and Condition 12 of NSR permit dated 6/12/02)

4. The approved fuel for the Heyl and Patterson thermal coal dryer is waste heat from the operation of coke ovens at Battery 2E. A change in the fuel may require a permit to modify and operate.

(9 VAC 5-80-110 and Condition 13 of NSR permit dated 6/12/02)

5. The thermal coal dryer is to be operated in compliance with federal emission requirements under 40 CFR, Part 60, Subpart Y (Attachment E), Standards of Performance for Coal Preparation Plants.

(9 VAC 5-50-410, 9 VAC 5-80-110 and Condition 20 of NSR permit dated 6/12/02; and 40 CFR 60, Subpart Y)

B. Monitoring

1. The permittee shall continuously monitor and record for each hour of operation, the pH of the venturi scrubber liquid. The pH of the scrubber liquid shall be maintained at an average level not less than 7.5.

(Condition 7 of NSR permit dated 6/12/02)

2. The permittee shall continuously monitor the temperature of the gas stream exiting the thermal dryer. The temperature monitoring device shall be certified by the manufacturer to be accurate within $\pm 3^{\circ}\text{F}$.

(Condition 20 of NSR permit dated 6/12/02; and 40 CFR 60.253, Subpart Y)

3. The permittee shall continuously monitor and record for each hour of operation, the pressure drop through the venturi scrubber. The monitoring device shall be certified by the manufacturer to be accurate within ± 1 inch water gauge.

(Condition 20 of NSR permit dated 6/12/02; and 40 CFR 60.253, Subpart Y)

4. The permittee shall continuously monitor and record for each hour of operation, the water supply pressure to the venturi scrubber. The monitoring device is to be certified by the manufacturer to be accurate within ± 5 percent of design water pressure.

(Condition 20 of NSR permit dated 6/12/02; and 40 CFR 60.253, Subpart Y)

5. All monitoring devices in Items 1-4 above are to be recalibrated annually. (40 CFR 60 Subpart Y)
6. For Items 3 and 4 above, the permittee shall establish a normal operating range of data so that any deviations or malfunctions can be determined.
(VAC 5-80-110; 40 CFR 60.253, Subpart Y)

C. Compliance Assurance Monitoring (CAM) Plan

1. The permittee shall monitor, operate, calibrate and maintain the the thermal dryer with venturi scrubber according to the following plan:

DRAFT

	INDICATOR NO. 1	INDICATOR NO. 2	INDICATOR NO. 3
I. Indicator	Liquid pH	Pressure Drop	Water Supply Pressure
A. Measurement Approach	pH for the scrubber liquid is measured continuously using a pH meter.	Pressure drop across the venturi is measured continuously using a differential pressure gauge.	Pressure drop is measured continuously using a pressure gauge.
II. Indicator Range	An excursion is defined as an average level greater than 7.5; excursions trigger an inspection, corrective action, and reporting requirement.	An excursion is a drop less than 20 inches w.c. Excursions trigger an inspection, corrective action, and a reporting requirement.	An excursion is defined as a pressure less than 12 psig. Excursions trigger an inspection, corrective action, and a reporting requirement.
III. Performance Criteria A. Data Representativeness	pH meter will be located in the tank to measure the scrubber liquid.	The differential pressure gauge monitors the static pressures across the venture scrubber.	The water pressure gauge monitors water supply pressure to the scrubber. The gauge is located close to the water discharge point.
B. Verification of Operational Status	Recorded hourly when operating.	Recorded hourly when operating.	Recorded hourly when operating.
C. QA/QC Practices and Criteria	Calibrate the pH meter annually. Maintenance according to manufacturer's specifications.	The device is to be certified by the manufacturer to be accurate within ± 1 inch water gauge and calibrated annually based on manufacturer's recommendation. Maintenance according to manufacturer's specifications.	The device is to be certified by the manufacturer to be accurate within $\pm 5\%$ of design water supply pressure and calibrated annually based on manufacturer's recommendation. Maintenance according to manufacturer's specifications.
D. Monitoring Frequency	Continuous when operating.	Continuous when operating.	Continuous when operating.
E. Data Collection Procedures			

	INDICATOR NO. 1	INDICATOR NO. 2	INDICATOR NO. 3
I. Indicator	Liquid pH	Pressure Drop	Water Supply Pressure
F. Averaging Period	24-hour	None	None

(9 VAC 5-80-110 and 40 CFR 64)

2. The permittee shall conduct the monitoring and fulfill the other obligations specified in 40 CFR 64.7 through 40 CFR 64.9.
(9 VAC 5-80-110 E and 40 CFR 64.6 (c))
3. At all times, the permittee shall maintain the monitoring equipment, including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
(9 VAC 5-80-110 E and 40 CFR 64.7 (b))
4. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the thermal dryer and venturi scrubber are operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of compliance assurance monitoring, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by inadequate maintenance or improper operation are not malfunctions.
(9 VAC 5-80-110 E and 40 CFR 64.7 (c))
5. Upon detecting an excursion or exceedance, the permittee shall restore operation of the thermal dryer (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup and shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator, designated condition, or below the applicable emission limitation or standard, as applicable.
(9 VAC 5-80-110 E and 40 CFR 64.7 (d)(1))
6. Determination that acceptable procedures were used in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.
(9 VAC 5-80-110 E and 40 CFR 64.7(d)(2))

7. If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Director, Southwest Regional Office and, if necessary, submit a proposed modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.
(9 VAC 5-80-110 E and 40 CFR 64.7(e))
8. If the number of exceedances or excursions exceeds 5 percent duration of the operating time for the thermal dryer for a semiannual reporting period, the permittee shall develop, implement and maintain a Quality Improvement Plan (QIP) in accordance with 40 CFR 64.8. If a QIP is required, the permittee shall have it available for inspection. The QIP initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the permittee shall modify the plan to include procedures for conducting one or more of the following, as appropriate:
 - a. Improved preventative maintenance practices;
 - b. Process operation changes;
 - c. Appropriate improvements to control methods;
 - d. Other steps appropriate to correct control performance; and
 - e. More frequent or improved monitoring.
(9 VAC 5-80-110 E and 40 CFR 64.8(a) and (b))

D. Recordkeeping

The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Southwest Regional Office. These records shall include, but are not limited to:

1. The pH of the venturi scrubber liquid. (Condition 7 of NSR permit dated 6/12/02)
2. The pressure drop through the venturi scrubber. (40 CFR 60, Subpart Y)
3. The water supply pressure to the scrubber. (40 CFR 60, Subpart Y)
4. The total annual hours of thermal dryer operation, calculated monthly as the sum of each consecutive 12 month period.
5. Records of annual calibration of the thermal dryer monitoring devices.
(Condition 12 of NSR permit dated 6/12/02)

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

VAC 5-50-50, 9 VAC 5-80-110; and 40 CFR 60, Subpart Y)

E. Performance Testing

1. The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.
(9 VAC 5-50-30 and 9 VAC 5-80-110)
2. The permittee shall complete performance testing on the thermal dryer (Emission Unit No. 13) exhaust stack to determine compliance with the emission limits listed in Section IV.A.2. of this permit. The tests shall consist of three runs, each at the maximum production rate of the thermal dryer. The test shall be performed, reported, and compliance demonstrated anytime after permit issuance but no later than 18 months prior to the expiration date of this permit. The details of the tests, including approval of test methods for the criteria pollutants, are to be arranged with the Director, Southwest Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. The permittee shall submit notifications for the test protocol submittal. Two copies of the test results shall be submitted to the Director, Southwest Regional Office within 45 days after test completion and shall conform to the test report format enclosed with this permit.

3. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method (40 CFR Part 60, Appendix A)
SO ₂	EPA Method 6
PM/PM-10	EPA Method 5, 9, 17

(9 VAC 5-80-110)

V. Process Equipment Requirements - Coal Handling and Crushing - Thermal Dryer

A. Limitations

1. The fugitive particulate emissions from the Cage Paktor coal pulverizer shall be controlled by enclosure and a recirculating air duct. The control systems shall be provided with adequate access for inspection.
(9 VAC 5-50-260, 9 VAC 5-80-110 and Condition 5 of NSR permit dated 6/12/02)
2. The following limitations from 9 VAC 5-50-410, Designated Standards of Performance, Subpart Y are applicable to coal handling equipment (conveyors) supplying coal to the thermal dryer (Emission Unit I.D. #13):
 - a. The permittee shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal, gases which exhibit 20 percent opacity or greater.
(40 CFR 60, Subpart Y and 9 VAC 5-80-110)

B. Monitoring

1. The permittee shall ensure that the recirculating air system is maintained and operated properly during pulverizer operation.
(9 VAC 5-80-110 and Condition 5 of NSR permit dated 6/12/02)
2. The permittee shall perform a visible emission observation on the coal handling equipment supplying coal to the thermal dryer. The visible emission observation shall be performed for a brief period of time to identify the presence of visible emissions. After the initial visible emissions check, a semi-annual visible emission observation shall be performed to ensure proper equipment operation. If, during any visible emission observation, visible emissions are observed (condensed water vapor/steam is not a visible emission), a visible emissions evaluation (VEE) shall be conducted using 40 CFR Part 60, Appendix A, Method 9 for six minutes. If the opacity average is less than 20%, no action shall be required. If the average opacity is 20% or higher, modifications and/or repairs shall be performed to correct the problem. If such correction action fails to correct the problem a VEE using 40 CFR

Part 60, Appendix A, Method 9, shall be conducted for 18 minutes to determine compliance with the opacity limit.

(9 VAC 5-80-110 and 40 CFR 60, Subpart Y)

C. Recordkeeping

The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Southwest Regional Office. These records shall include, but are not limited to:

1. Maintenance records for the air recirculating system for the Cage-Paktor pulverizer. (Condition 5 of NSR permit dated 6/12/02)
2. Records of visible emission checks and any resulting modifications and/or repairs required. (40 CFR 60, Subpart Y)
(9 VAC 5-80-110)

D. Testing

1. The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.
(9 VAC 5-80-110)

VI. Plant Wide Conditions

A. Limitations

1. The visible emissions from all coke oven exhaust stacks at the facility, the charging of all ovens at the facility, the thermal coal dryer exhaust stack, and the Cage-Paktor coal pulverizer shall not exceed twenty (20) percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown and malfunction.
(9 VAC 5-50-20, 9 VAC 5-170-160, 9 VAC 5-80-110 and Condition 16 of NSR permit dated 6/12/02; 40 CFR 60, Subpart Y; and 40 CFR 63.303, 306)
2. The particulate matter emissions from pushing coke, hot coke handling, and coke quenching shall be controlled by a coke side enclosure and a baffled quench tower using cleaned water and fresh water make-up. The coke side enclosure and quench tower shall be provided with adequate access for inspection.
(9 VAC 5-50-260, 9 VAC 5-80-110 and Condition 4 of NSR permit dated 6/12/02)

B. Monitoring

1. The permittee shall perform a visible emission observation on the coke oven battery stacks once each week during each week when there is operation. The visible emission observation shall be performed for a brief period of time to identify the presence of visible emissions. If, during any visible emission observation, visible emissions are observed (condensed water vapor/steam is not a visible emission), a visible emissions evaluation (VEE) shall be conducted using 40 CFR 60, Appendix A, Method 9, for six minutes. If the opacity average is 20% or less, no action shall be required. If the opacity average is higher than 20%, modifications and/or repairs shall be performed to correct the problem. If such correction action fails to correct the problem a VEE using 40 CFR Part 60, Appendix A, Method 9 shall be conducted for 18 minutes to determine compliance with the opacity limit. (Condition 16 of NSR permit dated 6/12/02)
2. The permittee shall perform a visible emission observation on the thermal dryer exhaust once each week during each week when there is operation. The visible emission observation shall be performed for a brief period of time to identify the presence of visible emissions. If, during any visible emissions observation, visible emissions are observed (condensed water vapor/steam is not a visible emission), a visible emissions evaluation (VEE) shall be conducted using 40 CFR 60, Appendix A, Method 9, for six minutes. If the opacity average is less than 20%, no action shall be required. If the opacity average is equal to or higher than 20%, modifications and/or repairs shall be performed to correct the problem. If such correction action fails to correct the problem a VEE using 40 CFR Part 60, Appendix A, Method 9 shall be conducted for 18 minutes to determine compliance with the opacity limit. (Condition 16 of NSR permit dated 6/12/02; and 40 CFR 60, Subpart Y)
3. The permittee shall perform a visible emission observation, during the first month after startup, on the Cage-Paktor coal pulverizer. The visible emission observation shall be performed for a brief period of time to identify the presence of visible emissions. After the initial visible emission observation, semi-annual visible emission observations shall be performed to ensure proper equipment operation. If, during any visible emission observation, visible emissions are observed (condensed water vapor/steam is not a visible emission), a visible emissions evaluation (VEE) shall be conducted using 40 CFR 60, Appendix A, Method 9, for six minutes. If the opacity average is less than 20%, no action shall be required. If the opacity average is 20% or higher, modifications and/or repairs shall be performed to correct the problem. If such correction action fails to correct the problem a VEE using 40 CFR Part 60, Appendix A, Method 9 shall be conducted for 18 minutes to determine compliance with the opacity limit. (Condition 16 of NSR permit dated 6/12/02; and 40 CFR 60, Subpart Y)
4. The permittee shall ensure that the quench tower/recirculating water system is maintained and in proper working order during operation. (Condition 4 of NSR permit dated 6/12/02)

5. Compliance with visible emissions from the charging of all ovens at the facility shall be determined by following the procedures in the emissions control work practice plan per 40 CFR 63.306. (40 CFR 63.303, 306)
(9 VAC 5-80-110)

C. Recordkeeping

The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Southwest Regional Office. These records shall include, but are not limited to:

1. Results of the VE checks for the coke oven stacks. (Condition 16 of NSR permit dated 6/12/02)
2. Results of the VE checks for the thermal dryer. (Condition 16 of NSR permit dated 6/12/02; 40 CFR 60, Subpart Y)
3. Results of the VE checks and any resultant modifications/repairs required for the Cage-Paktor pulverizer. (Condition 16 of NSR permit dated 6/12/02; 40 CFR 60, Subpart Y)
4. Maintenance records for the quench tower/recirculating water system. (Condition 4 of NSR permit dated 6/12/02)

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.
(9 VAC 5-50-50, 9 VAC 5-80-110 and Condition 16 of NSR permit dated 6/12/02; and 40 CFR 60, Subpart Y)

D. Testing

1. The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.
(9 VAC 5-50-30 and 9 VAC 5-80-110)

VII. MACT Standards—National Emission Standards for Hazardous Air Pollutants for Coke Ovens: Pushing, Quenching, and Battery Stacks, 40 CFR 63, Subpart CCCCC

The Maximum Achievable Control Technology (MACT) Standard for coke ovens, under 40 CFR 63, Subpart CCCCC (National Emission Standards for Hazardous Air Pollutants for Coke Ovens: Pushing, Quenching, and Battery Stacks) was proposed on July 3, 2001, and promulgated on April 14, 2003 . The MACT standard is applicable to this facility for the existing coke ovens per 40 CFR 63.7281 and 40 CFR 63.7282.

A. Work Practice Standards for Fugitive Pushing Emissions

1. The permittee shall visually inspect each oven prior to pushing.
2. The permittee shall comply with visual inspection requirements before pushing.
(9 VAC 5-80-110 and 40 CFR 63.7293 (a))

B. Quench Tower Requirements

1. The concentration of dissolved solids (TDS) in the water used for quenching shall not exceed 1100 milligrams per liter.
2. Each quench tower shall be equipped with baffles such that no more than 5 percent of the cross sectional area of the tower may be uncovered or open to the sky.
3. The baffles in each quench tower shall be washed once each day that the tower is used to quench coke, except as specified in 40 CFR 63.7295 (b)(2)(i) and (ii).
4. Each quench tower shall be inspected monthly for damaged or missing baffles and blockage.
5. Repair or replacement of damaged or missing baffles shall be initiated within 30 days and completed as soon as practicable.
(9 VAC 5-80-110 and 40 CFR 63.7295 (b)(1)(2)(3)(4))

C. Operation and Maintenance Requirements

1. The permittee shall prepare a schedule and procedures for the daily washing of baffles.
(9 VAC 5-80-110 and 40 CFR 63.7300 (b)(6))

D. General Requirements for Compliance

1. The permittee shall comply with the applicable emission limitations, work practice standards, and operation and maintenance requirements in 40 CFR 63, Subpart CCCCC at all times, except during periods of startup, shutdown, and malfunction as defined in 40 CFR 63.2.

2. The permittee shall develop a written startup, shutdown, and malfunction plan according to the provisions in 40 CFR 63.6(e)(3).
(9 VAC 5-80-110 and 40 CFR 63.7310 (a)(c))

E. Test Methods for Compliance with Quench Water TDS Limits

1. The permittee shall determine the total dissolved solids (TDS) concentration of the quench water using Method 160.1 in 40 CFR 136.3 (see “residue—filterable”) or acceptable alternative testing method, except that the permittee shall dry the total filterable residue at 103 to 105°C instead of 180°C.
(9 VAC 5-80-110 and 40 CFR 63.7325 (a)(2))

F. Continuous Compliance with Applicable Work Practice Standards

1. For each non-recovery coke oven battery subject to the work practice standards in 40 CFR 63.7293(a), the permittee shall demonstrate continuous compliance by maintaining records that document each visual inspection of an oven prior to pushing and that the oven was not pushed unless there was no smoke in the open space above the coke bed and there was an unobstructed view of the door on the opposite side of the oven.
 2. For each coke oven battery subject to the work practice standard for quenching in 40 CFR 63.7295(b), the permittee shall demonstrate continuous compliance according to the following requirements:
 - a. Maintain baffles in each quench tower such that no more than 5 percent of the cross sectional area of the tower is uncovered or open to the sky as required in 40 CFR 63.7295 (b)(1).
 - b. Maintain records that document conformance with the washing, inspection, and repair requirements in 40 CFR 63.7295 (b)(2), including records of the ambient temperature on any day that the baffles were not washed.
 - c. Maintain records of the source of makeup water to document conformance with the requirement for acceptable water in 40 CFR 63.7295 (a)(2).
- (9 VAC 5-80-110 and 40 CFR 63.7334 (c)(e))

G. Reporting Requirements

1. The permittee shall submit semiannual compliance reports according to the schedule in 40 CFR 63.7341 (a)(2).
2. The permittee shall comply with the requirements in 40 CFR 63.7341 (c) for the contents of the semiannual reports, including deviations from an emission limitation and from work practice standards.
(9 VAC 5-80-110 and 40 CFR 63.7341 (a)(c))

H. Records Retention

1. The permittee shall comply with the records retention requirements of 40 CFR 63.7342 (a), (c), and (d).
(9 VAC 5-80-110 and 40 CFR 63.7342 (a)(c)(d))

I. Records Format and Retention Time

1. The permittee shall comply with the records format and retention times as required by 40 CFR 63.7343.
(9 VAC 5-80-110 and 40 CFR 63.7343)

VIII. Insignificant Emission Units

The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant Emitted (5-80-720 B.)	Rated Capacity (5-80-720 C.)
2	Coal Storage Pile #1	720B	PM10	10,000 tons
3	Coal Storage Pile #2	720B	PM10	20,000 tons
10	Coke Loadout	720B	PM10	500 T/hr
11	Main Coke Storage Pile	720B	PM10	140,000 tons
12	Blending Coke Storage Piles	720B	PM10	500 tons
14	Quench Pit Sludge Storage Piles	720B	PM10	500 tons
16	Breeze Storage Pile	720B	PM10	1000 tons
17	Breeze Loadout	720B	PM10	50 T/hr
18	Baghouse Dust Loadout	720B	PM10	50 T/hr
19	FCA-1000	720C	VOC	6,000 gallon
20	No. 2 Fuel Oil	720C	VOC	10,000 gallon

Emission Unit No.	Emission Unit Description	Citation	Pollutant Emitted (5-80-720 B.)	Rated Capacity (5-80-720 C.)
21	Miscellaneous General Painting	720C	VOC	<1000 gal/yr total
22	Caustic Soda Storage Tank	720C	N/A	17,000 gallon
23	Three Pusher Machine Emergency Generators	720C	NO _x , VOC, CO, SO _x , PM10	Each <664 KW (diesel)
24	General Emergency Generator	720C	NO _x , VOC, CO, SO _x , PM10	930 KW (diesel)
26	Truck Bin	720C	PM10	100 tons
27	Temporary Coke Storage Area	720C	PM10	2000 tons
28	Temporary Coke Loadout	720C	PM10	2000 tons

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

IX. Permit Shield & Inapplicable Requirements

Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability
none		

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the

Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law.
(9 VAC 5-80-140)

X. General Conditions

A. Federal Enforceability

All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.

(9 VAC 5-80-110 N)

B. Permit Expiration

This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless a timely and complete renewal application consistent, with 9 VAC 5-80-80, has been submitted, to the Department, by the owner, the right of the facility to operate shall be terminated upon permit expiration.

1. The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.
2. If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-150.
3. No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9 VAC 5 Chapter 80.
4. If an applicant submits a timely and complete application under section 9 VAC 5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC 5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.
5. The protection under subsections F 1 and F 5 (ii) of section 9 VAC 5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-80 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.
(9 VAC 5-80-80 B, C and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)

C. Recordkeeping and Reporting

1. All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:
 - a. The date, place as defined in the permit, and time of sampling or measurements.
 - b. The date(s) analyses were performed.
 - c. The company or entity that performed the analyses.
 - d. The analytical techniques or methods used.
 - e. The results of such analyses.
 - f. The operating conditions existing at the time of sampling or measurement.
(9 VAC 5-80-110 F)
2. Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.
(9 VAC 5-80-110 F)
3. The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than **March 1** and **September 1** of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:
 - a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31.
 - b. All deviations from permit requirements. For purposes of this permit, deviations include, but are not limited to:
 - (1) Exceedance of emissions limitations or operational restrictions;
 - (2) Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or compliance assurance monitoring which indicates an exceedance of emission limitations or operational restrictions; or,
 - (3) Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.

- c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that “no deviations from permit requirements occurred during this semi-annual reporting period.”

(9 VAC 5-80-110 F)

D. Annual Compliance Certification

Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than **March 1** each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

1. The time period included in the certification. The time period to be addressed is January 1 to December 31.
2. The identification of each term or condition of the permit that is the basis of the certification.
3. The compliance status.
4. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.
5. Consistent with subsection 9 VAC 5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period.
6. Such other facts as the permit may require to determine the compliance status of the source.
7. One copy of the annual compliance certification shall be sent to EPA at the following address:

Clean Air Act Title V Compliance Certification (3AP00)
U. S. Environmental Protection Agency, Region III
1650 Arch Street
Philadelphia, PA 19103-2029.

(9 VAC 5-80-110 K.5)

E. Permit Deviation Reporting

The permittee shall notify the Director, Southwest Regional Office, within four daytime business hours, after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to General Condition IX.C.3. of this permit.
(9 VAC 5-80-110 F.2 and 9 VAC 5-80-250)

F. Failure/Malfunction Reporting

If, for any reason, the affected facilities or related air pollution control equipment fails or malfunctions and may cause excess emissions for more than one hour, the owner shall notify the Director, Southwest Regional Office, within four (4) daytime business hours of the occurrence. In addition, the owner shall provide a written statement, within 14 days, explaining the problem, corrective action taken, and the estimated duration of the breakdown/shutdown.
(9 VAC 5-80-250)

G. Severability

The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.
(9 VAC 5-80-110 G.1)

H. Duty to Comply

The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application.
(9 VAC 5-80-110 G.2)

I. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
(9 VAC 5-80-110 G.3)

J. Permit Action for Cause

1. This permit may be modified, revoked, reopened, and reissued, or terminated for cause as specified in 9 VAC 5-80-110 L, 9 VAC 5-80-240 and 9 VAC 5-80-260. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
(9 VAC 5-80-110 G.4)
2. Such changes that may require a permit modification and/or revisions include, but are not limited to, the following:
 - a. Erection, fabrication, installation, addition, or modification of an emissions unit (which is the source, or part of it, which emits or has the potential to emit any regulated air pollutant), or of a source, where there is, or there is potential of, a resulting emissions increase;
 - b. Reconstruction or replacement of any emissions unit or components thereof such that its capital cost exceeds 50% of the cost of a whole new unit;
 - c. Any change at a source which causes emission of a pollutant not previously emitted, an increase in emissions, production, throughput, hours of operation, or fuel use greater than those allowed by the permit, or by 9 VAC 5-80-11, unless such an increase is authorized by an emissions cap; or any change at a source which causes an increase in emissions resulting from a reduction in control efficiency, unless such an increase is authorized by an emissions cap;
 - d. Any reduction of the height of a stack or of a point of emissions, or the addition of any obstruction which hinders the vertical motion of exhaust;
 - e. Any change at the source which affects its compliance with conditions in this permit, including conditions relating to monitoring, recordkeeping, and reporting;
 - f. Addition of an emissions unit which qualifies as insignificant by emissions rate (9 VAC 5-80-720 B) or by size or production rate (9 VAC 5-80-720 C);
 - g. Any change in insignificant activities, as defined by 9 VAC 5-80-90 D.1.a(1) and 9 VAC 5-80-720 B and 9 VAC 5-80-720 C.
(9 VAC 5-80-110 G, 9 VAC 5-80-110 J, 9 VAC 5-80-240, and 9 VAC 5-80-260)

K. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege.
(9 VAC 5-80-110 G.5)

L. Duty to Submit Information

1. The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality.
(9 VAC 5-80-110 G.6)
2. Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G.
(9 VAC 5-80-110 K.1)

M. Duty to Pay Permit Fees

The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-305 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-355. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by **April 15** of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department.
(9 VAC 5-80-340 C)

N. Fugitive Dust Emission Standards

During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:

1. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;
2. Application of asphalt, oil, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;

3. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or other similar operations;
 4. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and,
 5. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.
- (9 VAC 5-40-90 and 9 VAC 5-50-90)

O. Startup, Shutdown, and Malfunction

At all times, including periods of startup, shutdown, soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

(9 VAC 5-50-20)

P. Alternative Operating Scenarios

Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80, Article 1.

(9 VAC 5-80-110 J)

Q. Inspection and Entry Requirements

The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

1. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.
2. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.
3. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
4. Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9 VAC 5-80-110 K.2)

R. Reopening For Cause

The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-80 F.

1. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
2. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
3. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-110 D.

(9 VAC 5-80-110 L)

S. Permit Availability

Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.

(9 VAC 5-80-150 E)

T. Transfer of Permits

1. No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another.
(9 VAC 5-80-160)
2. In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-200.
(9 VAC 5-80-160)
3. In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-200.
(9 VAC 5-80-160)

U. Malfunction as an Affirmative Defense

1. A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the conditions of paragraph 2 are met.
2. The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:
 - a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.
 - b. The permitted facility was at the time being properly operated.
 - c. During the period of malfunction, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit.
 - d. For malfunctions that occurred for one hour or more, the permittee submitted to the Board by the deadlines described in **Failure/Malfunction Reporting** above, a notice and written statement containing a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notice fulfills the requirement of 9 VAC 5-80-110 F.2.b to report promptly deviations from permit requirements.

3. In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any requirement applicable to the source.

(9 VAC 5-80-250)

V. Permit Revocation or Termination for Cause

A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe, any permit for any of the grounds for revocation or termination or for any other violations of these regulations.

(9 VAC 5-80-260)

W. Duty to Supplement or Correct Application

Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.

(9 VAC 5-80-80 E)

X. Stratospheric Ozone Protection

If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.

(40 CFR Part 82, Subparts A-F)

Y. Accidental Release Prevention

If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.

(40 CFR Part 68)

Z. Changes to Permits for Emissions Trading

No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.

(9 VAC 5-80-110 I)

AA. Emissions Trading

Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

1. All terms and conditions required under 9 VAC 5-80-110, except subsection N, shall be included to determine compliance.
2. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.
3. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-50 through 9 VAC 5-80-300.

(9 VAC 5-80-110 I)